

# HOME/SCHOOL CONNECTION

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## Discovering Density

### Will it make layers?

Work with a family member to design a challenge involving density. One person makes three or more solutions (using the same solute) of different concentrations in a variety of colors. Use food coloring to decipher between the recipes. (Note: Be sure to use a solute that has been approved as *safe* and *readily available*!)

Try to create layers by carefully combining each solution in an empty container (the smaller and narrower, the better) using a dropper or other device. Try to arrange each solution according to its density – starting at the bottom from most to least dense.

How did you know if you were successful in meeting this challenge?

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Describe the process you used to determine the differences in densities of your solutions.

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**TURN TO THE BACK SIDE**

What observations did you make as you conducted this experiment? Do you have any questions or things you are still wondering about the densities of liquids?

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**BONUS**

*With permission*, test the densities of several safe household liquids. Do they create layers? If so, which liquids are denser than the others, and which are less dense? How do you know? Explain with words and pictures in the space below.